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REMARKS

Claims 1-10, 12-15, 17-30, 32-43, 45, and 46 are pending, with claims 1, 4, 13-15, 21, 24, 33, 34, 37, and 46 being independent. Claims 2, 22, and 35 have been cancelled by this amendment without prejudice. Claims 1, 3, 5, 14, 15, 21, 23, 25, 34, 36, and 38 have been amended. No new matter has been added. Reconsideration and allowance of the above-referenced application are respectfully requested.

Allowable Subject Matter:

Claims 13, 33, and 46 have been allowed.

Claim Rejections Under 35 U.S.C. 112:

Claims 21-28 stand rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite due to the use of the terms "first circuit", "second circuit", and "third circuit". This contention is respectfully traversed.

Independent claims 21 and 24 both recite, "a first circuit operative to provide a voltage signal; a second circuit; a voltage buffer coupled between the first and second circuits and operative to provide a programmable gain to the voltage signal". These claims cover a variety of implementations, but this claim language is still definite in view of the specification. For example, as shown and described in connection with FIG. 6, the first circuit covers circuitry such as a reference circuit 605, which is made clear in the claim by the recitation, "a voltage buffer coupled between the first and second circuits and operative to provide a programmable gain to

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the voltage signal". (Emphasis added; see the specification at paragraph [0028].) Additionally, the second circuit covers various circuitry that can be connected with the voltage buffer, such as a control circuit 615 or a load circuit 610.

With respect to dependent claims 26 and 28, claim 26 recites, "wherein the programmable resistance comprises a third circuit, and wherein the switch provides a first resistance value in parallel with the resistive element when activated and is effectively removed from the third circuit when deactivated". In view of the specification, it is clear that the claimed third circuit covers circuitry that includes elements such as transistors 302, 304, 314, and 316, and also resistors 306, and 308. Thus, those skilled in the art will readily understand the scope of the claimed subject matter in view of the specification. In view of this, withdrawal of the 35 U.S.C. 112 rejection of claims 21-28 is respectfully requested.

Claim Rejections Under 35 U.S.C. 102:

Claims 1-10, 12, 14, 15, 17-32, 34-43, and 45 stand rejected under 35 U.S.C. 102(e) as allegedly being anticipated Yang (US Patent 6,710,657). These contentions are respectfully traversed.

Interview Summary:

Examiner Nguyen is thanked for the interview that was conducted with Applicants' representative, Mr. Kirkland, on July 20, 2005. During the interview, claims 1, 2, 4, 14, 15, 21, 24, 34, and 37, and the Yang reference (US Patent 6,710,657) were discussed. Agreement was

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reached that Yang does not teach the configuration of claim 2, including the output node having the connection as claimed. Additionally, since claims 4, 24, and 37 have similar configurations as claim 2, none of these claims are anticipated by Yang. Independent claims 1, 14, 15, 21, and 24 have been amended to include features that are not anticipated by Yang, as agreed.

In addition, these claims, prior to amendment, should be allowable for at least the following reasons. The current Office Action misidentifies the components in Yang, in that the transconductance circuitry (320/T1) in figure 4, "can be read as a gain stage". However, the transconductance circuitry (320/T1) in figure 4 is not a gain stage; this circuitry takes an input voltage and converts it to a current. It should be noted that the gain stage in circuit 300 in figure 4 is made up of T2 and T3 (and T5). In addition, the circuitry identified in the Office Action as a programmable resistance is in fact a programmable gain. Yang teaches a current steering-type gain control circuit capable of providing a non-zero minimum gain in response to readily reproducible control signal conditions that do not require sophisticated control signal-generating circuitry. The circuitry described in Yang is focused current steering and is very different from the presently claimed subject matter.

Nonetheless, for the purposes of expediting prosecution, the claims have been amended to include the structure that makes clear the originally claimed subject matter is very different than the circuitry described in Yang. Thus, independent claims 1, 4, 14, 15, 21, 24, 34, and 37 are now in condition for allowance. The remaining dependent claims are also patentable for at least the above reasons.

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Because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. The absence of a reply to a specific issue or comment does not signify agreement with or concession of that issue or comment. Moreover, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

It is respectfully suggested for all of these reasons, that the current rejection is overcome; that none of the cited art teaches or suggests the features which are claimed, and therefore that all of these claims should be in condition for allowance. A formal notice of allowance is thus respectfully requested.

This Amendment After Final Rejection is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37 C.F.R. §1.116. At the very least, however, it is believed clear that the formal rejection has been overcome and the presentation of independent claims 1, 14, 15, 21, and 34 with previously searched subject matter of cancelled claim 2 is, in substance, an adoption of the agreement reached during the interview with the Examiner. Accordingly, entry of this Amendment After Final Rejection, as an earnest attempt to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, he/she is respectfully requested to contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

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No fees are believed due with this response. Please apply any necessary charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: Ausust 2, 2005

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